

REMARKS

Claims 1-10 are pending in this patent application. Applicants have amended claims 1, 5, 7 and 10 to clarify the subject matter recited in those claims. Support for the amendments to the claims can be found throughout the specification. No new matter has been added by this amendment. Applicants respectfully request reconsideration and allowance of this application in view of the above amendments and the following remarks.

Claim 1 is objected to as containing the phrase "characterized in that". Applicants have amended claim 1 to delete the language objected to by the Examiner.

Claims 1, 4, 7 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as their invention. It is believed that the rejection was intended for claim 5, rather than claim 4.

Applicants have amended the rejected claims to re-phrase the claims to utilize language in conformity with more conventional U.S national practice. It is believed that the majority of the objections have been overcome by these amendments to the claims. However, applicants disagree with the Examiner's assertion that claim 1 is unclear as to the meaning of the phrase "a third coating layer of the protective and decorative laminar structure." The claims clearly recite a process in which a substrate is provided with a decorative and protective laminar structure having at least three layers. The Examiner is kindly requested to clarify his rejection as to what specific definitions are considered confusing.

Claims 1-6 and 8-10 are rejected under 35 U.S.C. §103(a) as being unpatentable over JP 02300281 in view of Matsuo et al., U.S. Patent No. 5,190,830, Stromberg et al., U.S. Patent No. 3,674,671, and in view of what the Examiner characterizes as admitted prior art. Claims 1-10 are rejected under 35 U.S.C. §103(a) as being unpatentable over JP 02300281 in

view of Soltwedel et al., U.S. Patent No. 5,624,978. These rejections are respectfully traversed for at least the following reasons.

The present invention is drawn to a process for coating three-dimensional substrates. The claimed invention provides a process that enables the user to avoid the use of spray application of coating compositions. In a method according to the invention, a first primer layer and a second layer are applied without spray application (e.g., electrophoretically) and the final top coat is applied in form of a plastic film, after stoving the first and second layers. The plastic film is part of the total multi-layer coating and provides decorative effect as well as protection for the layers beneath.

None of the cited references, either alone or in combination, disclose a method for preparing a multi-layer coating using an unpigmented or pigmented plastic film as the last layer of the coating composition. The Examiner cites the JP '281 reference as disclosing a method of temporarily protecting a coated surface of a new car for transportation. The method comprises a step of applying a removable plastic film and/or wrapping the car with heat shrinkable plastic film. As disclosed in the cited reference and as stated by the Examiner, the plastic films taught in the cited JP '281 reference are of a temporary nature and are only used for a short period of time during the transportation of the cars to the end users. Clearly, the disclosed plastic films are not intended to be a part of a laminar structure that provides a decorative and protective effect to the substrate during the normal use of a car. The plastic film disclosed in the JP '281 reference is not part of the coating composition, as it is subsequently removed and is merely used for surface protection reasons during transportation of a vehicle.

Applicants submit that the nature of the plastic film in the claimed coating composition is clearly recited in the claim 1. The plastic film according to the present invention is a part of a coating laminar structure that comprises at least three different

coatings, one of which is a plastic film. This film is not intended to be removed upon delivery of a vehicle, or provide a temporary protection of the decorative and protective laminar coating. It is a part of the laminar coating, and the plastic film, in fact, determines, alone or in combination with the second coating layer, the final appearance of the coated substrate, i.e., the decorative appearance of the vehicle. The references alone or in combination do not teach or suggest the claimed method for production of a three dimensional substrate provided with a protective laminar structure comprising, as its top layer, a plastic film which determines the decorative effect of the laminar structure.

Accordingly, Applicants respectfully request that the rejections be withdrawn.

In view of the foregoing, Applicants submit that this application is in condition for allowance. Timely notice to that effect is respectfully requested. If questions relating to patentability remain, the Examiner is encouraged to contact the undersigned to discuss the same.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached Appendix is captioned "Version with markings to show changes made".

Respectfully submitted,

PILLSBURY WINTHROP LLP

By Irina Zemel
Irina S. Zemel
Reg. No. 43,402
Tel: (703) 905-2227
Fax: (703) 905-2500

ISZ

1600 Tysons Boulevard
McLean, Virginia 22102
(703) 905-2000

APPENDIX

VERSION WITH MARKINGS TO SHOW CHANGES MADE

Please amend claim 1 as follows:

1. (Three Times Amended) A process for the production of a three-dimensional substrate provided with a protective and decorative laminar structure, [characterised in that] comprising:

applying a primer layer of a coating composition (I) which is electrically conductive in the stoved state [is applied] without spraying onto an electrically conductive substrate and [stoved] stoving said primer layer[, whereupon a] prior to shaping the substrate [not yet] in the desired three-dimensional shape [is shaped, whereupon];

electrophoretically depositing a second coating layer of an electrophoretically depositable coating composition (II) [is electrophoretically deposited] and [stoved] stoving said second coating layer; and

[whereupon] applying a plastic film [is applied] as a third coating layer of the protective and decorative laminar structure;

wherein said plastic film, either alone or in conjunction with the second coating layer, determines the decorative effect of the laminar structure.

5. (Twice Amended) A process according to claim 1, [wherein, once the] further comprising subsequently applying and stoving the conductive primer layer, [has been applied and stoved,]

optionally stamping or cutting said substrate; and

shaping the substrate [is shaped] three-dimensionally [and optionally previously stamped or cut].

7. (Twice Amended) A process according to claim 1, wherein the conductive primer layer is applied onto both sides of a substrate in the form of a sheet metal coil [using] by [the] a coil coating process [and stoved],

stamping out sheet metal components [are stamped out] to form the coil and [shaped] shaping said metal components [and then provided with the] subsequent to applying and stoving the primer layer and prior to electrophoretically depositing the second coating layer [by electrophoretic deposition].

10. (Twice Amended) A three-dimensional substrate provided with a protective and decorative laminar structure obtained according to the process of claim 1.